

**MEETING SUMMARY  
SR 520 BRIDGE REPLACEMENT AND HOV PROJECT  
EXECUTIVE COMMITTEE**

MOHAI, Seattle, WA  
April 13, 2004 9:00 – 11:00 A.M.

**Welcome and Meeting Objectives**

Aubrey Davis, Washington State Transportation Commission Chair, opened the meeting by welcoming the Executive Committee and members of the public. Aubrey also introduced the new members of the Committee. The new members include: Councilmember Bob Ferguson, King County Council, replacing Cynthia Sullivan; Councilmember Jean Godden, Seattle City Council, replacing Heidi Wills; and Mayor Mary Odermat, City of Medina, replacing Dan Becker. Also Mayor Connie Marshall, City of Bellevue, is now representing the Sound Transit Board, replacing Dave Earling. Councilmember Claudia Balducci, Bellevue City Council, will take Mayor Marshall's place representing Bellevue on the Committee.

The objectives for the meeting were as follow: update the Committee on status of work since the October 23, 2003 meeting, including reporting on the Accelerated Construction Technology Transfer (ACTT) conference on March 15 - 18 and updating on the Cost Estimation Validation Process (CEVP) taking place the week of April 12<sup>th</sup>; provide an update on the SR 520 tolling study; discussion on unconstrained volumes across Lake Washington from the Congestion Relief Analysis led by Michael Cummings of the WSDOT's Urban Planning Office; report on the 8-lane alternative; and update the Committee on continued community outreach.

**Project Update**

Since October, the project team has continued analysis of the alternatives to be included in the Environmental Impact Statement (EIS). The EIS will include 16 discipline reports for each alternative. The project is on schedule with the draft EIS due out in the summer of 2005. The project is on track for the Executive Committee to choose a preferred alternative by fall of 2005. Maureen Sullivan, WSDOT Project Director, reported on ACTT and CEVP:

**ACTT Conference (Accelerated Construction Technology Transfer)**

The ACTT Conference took place March 16-18 at the Sheraton Hotel in Seattle. Federal Highways Administration (FHWA) and WSDOT sponsored the conference. The purpose of the conference was to explore innovative ways to build the SR 520 Bridge Replacement and HOV Project faster and more efficiently. Ninety participants from around the state and country took part in the conference over three days. Participants included experts in design, environmental, planning, transit and contracting. The goals of

the conference were to shorten the construction schedule, identify staging & phasing options, identify elements with near term benefit, minimize construction impacts, explore innovative construction techniques, identify alternative project delivery mechanisms, and look at creative financing strategies.

The major findings from the conference included the following:

- Possible reduction to the construction schedule of one to two years,
- Suggestions for potential first phase elements,
- Recommendation for the traditional design/bid/build contracting method for the Evergreen Point Bridge,
- Identification of the need for acquiring right-of-way to the north of the current structure for the Eastside touchdown in order to minimize traffic impacts or avoid complete closure of the bridge, and
- Temporary roadways and closures.

Suggestions that came from the ACTT Conference:

- 1) Look at ways to coordinate the Montlake flyer stops with Sound Transit's proposed North Link,
- 2) Possibly reevaluate integration of the bicycle/pedestrian lanes across the lids on the Eastside around 84<sup>th</sup> and 92<sup>nd</sup>.
- 3) Potentially reevaluate consolidating the flyer stops on the Eastside.

A full report on the ACTT conference will be released sometime in May.

#### CEVP (Cost Estimation Validation Process)

CEVP looks at not just the schedule and related costs, but also tries to identify potential risks and opportunities for the project, to finally provide a more exact estimation of costs related to the project. CEVP analysis is done by outside consultants, who estimate costs using mid-construction dollars. The CEVP workshop is taking place April 12<sup>th</sup> through the 15<sup>th</sup>. Once the workshop is complete the consultants will run their findings through modeling to arrive at updated cost estimates for all phasing options and alternatives. Updated results will be available later in June.

#### Comments/Questions

Fred McConkey, Town of Hunts Point, asked why the project is repeating all these steps that have been already explored in the past.

*The point of ACTT is to take a step back and look at the overall project and see if this is where we want to be. The findings that come out of ACTT are just suggestions and will not necessarily be included in design.*

Jeanne Berry, Town of Yarrow Point, reminded the project of how vocal her community was at prior meetings regarding lids and bicycle / pedestrian connections.

## Tolling Study Update

Brent Baker, Parsons Brinckerhoff, gave an update on the SR-520 Toll Feasibility Study. The Toll Feasibility Study and its assumptions are distinct from those of the EIS. The tolling assumptions found in the SR 520 Bridge Replacement and HOV Project EIS look at 2030 traffic demand conditions and a reasonable upper bound toll structure. The SR-520 Toll Feasibility Study (Toll Study) examines demand conditions beginning with the scheduled opening year of operation, 2014, under two, time-of-day variable “bookend” tolling objectives. The Toll Study’s primary objective is to assess the *funding capacity* of tolling. The traffic modeling in the EIS is trying to identify the peak period effects of each alternative.

Many factors determine how much revenue will come from tolling. These factors include: diversion, land use, toll rates, costs of toll collections, tolling objectives, and bridge maintenance. The Toll Study looked at two bookend strategies or objectives for tolling. The first bookend sets toll rates sufficient to manage traffic flows and prevent congestion. The other bookend sets toll rates to maximize toll revenue, and thus, project funding. Both options assumed a variable toll rate based on time of day and only included the “Nickel Package” improvements for roadways around the region. The Traffic Management objective has a range of tolls in 2014 dollars from free to \$3.00 each way depending on the time of day, with a weighted average toll rate of \$1.74. The Maximum Funding objective has a range of between \$0.75 and \$4.60 each way, also in 2014 dollars, with a weighted average toll of \$3.07. The values of time used in the modeling to establish the toll rates were estimated from the SR-520 Bridge User Stated Preference Survey, conducted in March 2003.

There are many types of toll diversion including: changing to a toll-free mode such as HOV or transit, choosing an alternate route, changing trip destination, combining multiple trips, and eliminating a trip all together. In general, toll diversion was less under the Traffic Management toll objective. Under both toll objectives, toll diversion of vehicle trips was somewhat less in the six-lane alternative compared with the four-lane alternative, and the net toll diversion of *person trips* was significantly less. This is because the six-lane alternative provides an opportunity for making the same trip at the same time by HOV or transit. *Route* diversion to I-90 and SR 522 is low to very low during peak times as these alternative routes are assumed to be highly congested, and thus, relatively unattractive at peak times. Route diversion is more likely during off peak times, despite lower tolls on SR-520. The study shows that for selected travel between Seattle and the Eastside that would clearly choose SR-520 over I-90 without tolls, the cost of the toll would likely be less than the travel cost of using I-90 instead, measured by the time and vehicle operating costs.

The study looked at 24 financial scenarios reflecting combinations of toll objectives, operating conditions, and financing assumptions. For the six-lane alternative, the funding capacity of tolling ranges between \$320 million to \$1.07 billion, with tolls leveraged over 30 years. Many scenarios could likely yield approximately \$700 million

in funding for the bridge replacement. Revenues for the four-lane alternative are about five to ten percent less.

#### Questions/Comments

Grace Crunican, City of Seattle asked if tolls were assumed on I-90 for this study.

*No. However, a previous regional tolling study looked at tolls on I-90.*

Mayor McConkey, asked if tolls were one way or two way.

*Tolls are one-way amounts charged in both directions.*

Jim Horn, Washington State Senate, recommended that study also show what happens to I-405, SR 522, and other highways because of toll diversion.

Thomas Paine, City of Redmond, asked if the study looked at traffic coming onto arterials to divert tolls.

*The study did not see any major diversion impacts to I-90, SR-522 and I-405 during peak periods, though such diversion does occur to these facilities and local arterials during the off-peak times. The EIS will look more closely at diversion, including to local arterials.*

David Asher, City of Kirkland, asked if the study looked at any scenarios that had tolls on I-90.

*We did not, but most likely there would be more traffic on SR 520 during off-peak times because there would be less incentive for toll route diversion to I-90.*

Thomas Paine asked how the travel costs in the alternative route graphic were figured.

*Value of time for travel came from the stated preference survey research. Vehicle operating costs were taken at the IRS rate of 36¢ per mile. Research shows that the perceived operating cost is around twenty cents per mile, but that the true ownership cost including depreciation, insurance, etc. is about fifty cents a mile. For this study, the IRS rate essentially splits the difference.*

Aubrey Davis commented that all plans for the Evergreen Point Bridge include tolling, but tolling other roads is still an unknown.

#### **Unconstrained Travel Demand Across Lake Washington**

Mike Cummings, WSDOT Urban Planning Office, presented material from the Congestion Relief Analysis study looking at travel demand on highways if capacity was not constrained. In an unconstrained scenario there would be approximately 500,000 cross-lake trips a day in 2025. I-90 and SR 520 would each receive approximately forty percent or 200,000 of those trips. SR 522 would handle the other twenty percent or 50,000 trips. These numbers were presented in a graphic that was included as a handout to attendees. If all of this demand (no transit or carpools) were to drive cars, both SR 520

and I-90 would have to be expanded to 10 lanes to allow free-flow condition during the peak periods, assuming no tolls on either bridge crossing.

Questions/Comments (format of this Q/A section is different than the others)

Tim Ceis, City of Seattle, asked what is the point of this information when we live in a constrained world.

Senator Horn answered that this study identifies where people want to go. By understanding that you can most efficiently spend transportation dollars by building the roads with the greatest benefit. If the facility is not meeting unconstrained demand then there are impacts to the surrounding communities.

Tim Ceis commented that Seattle streets are constrained and the city cannot just be paved over.

Senator Horn commented that you avoid building unnecessary roads by looking at unconstrained demand and that Seattle has always been against allowing more lanes into the city. Seattle blocked the design for 10 lanes on I-90 causing I-90 to operate inefficiently.

Tim Ceis responded that you could also invest in other transit systems such as light rail. Aubrey Davis commented that we know we will not meet unconstrained demand but the project can use this study when looking at public policy, pricing, and reviewing the alternatives.

Grace Crunican asked how much this study costs.

*The study is looking at unconstrained demand in various areas around the state such as Vancouver, Spokane, and the Puget Sound region and costs \$3.8 million.*

## **I-5 Considerations for the 8-Lane Alternative**

Julie Meredith, WSDOT Engineering Manager, and Jim Parsons, Parametrix, updated the Committee on the potential traffic impacts to I-5 of the eight-lane alternative and what might need to be done to mitigate those effects. The four-lane alternative would send from the general-purpose lanes of SR 520 approximately 3,900 vehicles an hour westbound to I-5 during the peak hour operations in 2030. As a comparison, the six-lane alternative would send approximately 3,700 vehicles from the general purpose lanes. The eight-lane would send approximately 4,600 vehicles per hour. This gives a difference of approximately 1,000 more vehicles and hour between the six- and eight-lane alternatives. Accommodating those extra vehicles onto an already constrained and overcapacity roadway will be challenging.

To accommodate the additional traffic coming onto I-5 from an 8-lane SR 520 you would have to extend SR 520 into downtown. The reason for this is that the latent demand on I-5 is so high that whatever improvements are made to I-5 are quickly overburdened by the

additional traffic that would divert from parallel north/south routes to the freeway. The project did not look at this. Instead, it looked at adding one lane in each direction on I-5 from SR 520 to I-90. To do this at the Convention Center you would need to tunnel under the existing highway to accommodate the additional lanes. You would also have serious property impacts east of I-5 around James and Madison Street. The construction challenges with this alternative are cut and cover tunnels, rebuilding pilings, coordinating with Sound Transit's proposed North Link route, and effects to I-5 mainline traffic. While possible all of these actions will be very costly and highly disruptive to existing traffic.

This analysis shows that the actions needed to accommodate the added traffic on I-5 are much bigger than the SR 520 project. Continued analysis of the I-5 corridor will be done in the forthcoming I-5 Study which will look at the corridor between Northgate and Boeing Access Road. The findings on the traffic impacts to I-5 of the eight-lane SR 520 alternative will be reported in the SR 520 Draft EIS, but detailed study of the impacts of widening I-5 to accommodate the additional SR 520 traffic will not be included and instead depend on the forthcoming I-5 DEIS. This means there would need to be a supplemental EIS, if the 8-Lane alternative were chosen as the preferred.

#### Questions/Comments

Mayor McConkey asked if there were any cost estimates for improvements that would need to be done to I-5.

*No, but tunneling would be quite expensive.*

Tim Ceis asked if this would be the end of the 8-lane alternative in the EIS.

*A report on the engineering and traffic analysis completed to date will go in the EIS but no other analysis.*

Tim Ceis requested a meeting with WSDOT to discuss the details of the I-5 Corridor Study.

*Mike Cummings answered he could set that up.*

#### **Community and Agency Outreach**

Julie Meredith updated the Committee on community and agency outreach since the last committee meeting in October.

A workshop looking at the methodologies in the EIS was held on March 30<sup>th</sup>. The final methodologies will be available on the project web site later this month.

Public meetings were held last October on both sides of the lake. Citizens provided comments on the alternatives and tolling.

The project met with the Arboretum, to discuss impacts and opportunities to improve the park. The project also met with the University of Washington's City/University Citizens

Advisory Committee (CUCAC) and presented an overview of the project. The project team will meet with CUCAC again to discuss the local effects the project could have on the University and its surrounding communities.

The project is evaluating recommendations given by the Local Impacts Committee (LIC). The LIC is a separate project funded jointly by the Washington State Legislature and the City of Seattle. The LIC is analyzing the local impacts of the SR 520 Bridge Replacement and HOV Project.

In March, the project met with citizens on the Eastside for the first in a series of community roundtables. The Eastside Roundtable looked at possible designs for the proposed lids at Evergreen Point Road, 84<sup>th</sup> and 92<sup>nd</sup>. Roundtables will continue on both sides of Lake Washington over the next few months.

### **Public Comments**

Jonathan Dubman, Montlake Community Council, purposed the project look at building a transit center at the Montlake interchange. The transit center would serve both buses and Sound Transit's future North Link light rail route. He purposed using unused Sound Transit funds reserved for the eastside.

Virginia Gunby, 1000 Friends of Washington, urged the project to pursue better coordination with Sound Transit. She also, reminded the project they needed to keep the Advisory Committee and the general public involved in the process.

Maureen Sullivan stated that the project is coordinating with Sound Transit and many issues including transit connections and the vent shaft location for the proposed North Link tunnel.

Grace Crunican expressed her discontent with having no Technical Committee meeting prior to the Executive meeting. She would like a chance for her staff to brief her before meetings occur.

*The committees are evolving. The Technical Committee will be looking at some very specific technical issues. The project team did not do a good job briefing the jurisdictions regarding the substance of this meeting. We will do a better job of preparing the members before the meeting.*

The next Executive Committee meeting will be sometime in fall of this year.

### **Committee Members**

| <b>Present</b> | <b>Last</b> | <b>First</b> | <b>Organization</b> |
|----------------|-------------|--------------|---------------------|
| X              | Asher       | David        | City of Kirkland    |
| X              | Balducci    | Claudia      | City of Bellevue    |

| <b>Present</b> | <b>Last</b> | <b>First</b> | <b>Organization</b>                        |
|----------------|-------------|--------------|--|
| X              | Berry       | Jeanne       | Town of Yarrow Point                       |
| X              | Bowman      | Jennifer     | Federal Transportation Administration      |
| X              | Burleigh    | Mary-Alice   | City of Kirkland                           |
| X              | Cairns      | Bryan        | City of Mercer Island                      |
| X              | Ceis        | Tim          | City of Seattle                            |
| X              | Crawford    | Jack         | Sound Transit                              |
| X              | Crunican    | Grace        | City of Seattle                            |
| X              | Davis       | Aubrey       | WSDOT                                      |
|                | Dye         | Dave         | WSDOT-UCO                                  |
|                | Earling     | Dave         | Sound Transit                              |
|                | Edwards     | Bob          | Puget Sound Regional Council               |
| X              | Ferguson    | Bob          | King County Council                        |
|                | Godden      | Jean         | Seattle City Council                       |
| X              | Horn        | Jim          | Washington State Senate                    |
| X              | Ives        | Rosemarie    | Redmond Mayor                              |
|                | Jacobsen    | Ken          | Washington State Senate                    |
| X              | Jahncke     | El           | Mercer Island Mayor                        |
|                | Kargianis   | George       | Washington State Transportation Commission |
|                | Krochalis   | Rick         | Federal Transit Administration             |
|                | Leonard     | Jim          | Federal Highway Administration             |
| X              | Marshall    | Connie       | Sound Transit                              |
| X              | Martin      | George       | Clyde Hill Mayor                           |
| X              | Mathis      | Daniel       | Federal Highway Administration             |
| X              | McConkey    | Fred         | Hunts Point Mayor                          |
|                | McKenna     | Rob          | King County Council                        |
|                | Murray      | Ed           | WA State House of Representatives          |
| X              | Noble       | Phil         | Bellevue City Council                      |
| X              | Odermat     | Mary         | City of Medina                             |
| X              | Paine       | Thomas       | Redmond Council                            |
|                | Pflug       | Cheryl       | WA State House of Representatives          |
|                | Rourke      | Philip       | City of Clyde Hill                         |
|                | Rutledge    | Steve        | Town of Yarrow Point                       |
| X              | Sullivan    | Maureen      | WSDOT-UCO                                  |
| X              | Taniguchi   | Harold       | King County                                |



## **Public Participants**

- Sheldon Jahn, City of Medina
- David Allen, City of Seattle
- Sally Clark, King County Council
- Ann Martin KingCounty Department of Transportation
- Dia Felice Salogga, Hamlin resident
- Jonathan Dubman, Montlake Community Club
- Chris Johnson, King County
- Joel Pfundt, Redmond
- Chris Hyson, SRC
- Andrew Kwatinetz
- Mitch Wasserman, City of Clyde Hill
- Kim Becklund, City of Bellevue
- Jeanine Souki, Seattle City Council
- Pete Beaulieu, Puget Sound Regional Council
- David Doud
- Larry Sinnot, Ravenna/Bryant Community Association
- Virginia Gunby, 1000 Friends of Washington

## **Project Team Members**

- Maureen Sullivan, WSDOT-UCO
- Julie Meredith, WSDOT-UCO
- Eric Chipps, Sound Transit
- Lindsay Yamane, Parametrix
- Lorie Parker, CH2M Hill
- Brent Baker, Parsons Brinckerhoff
- Jim Parsons, Parametrix
- Susie Serres, EnviroIssues
- Bryan Jarr, EnviroIssues
- Stacey Howery, EnviroIssues